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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,893	05/15/2001	David J. Bon	T30321	1142

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EXAMINER

PEREZ DAPLE, AARON C

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 11/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,893

Applicant(s)

BON ET AL.

Examiner

Aaron C Perez-Daple

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 3-17 and 20-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 2.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

1. This action is in response to application filed 05/15/01.
2. Claims 1-27 are presented for examination.
3. This action is NON-FINAL.

Election/Restrictions

4. During a telephone conversation with Michael Skehot (Reg. 36682) on November 10, 2003 a provisional election was made without traverse to prosecute the invention of a computerized master-slave system, claims 1, 2, 18 and 19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3-17, and 20-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1, 2, 18 and 19 drawn to a generic master-slave control system, class 700, subclass 3.
 - II. Claims 3-17, and 20-27 drawn to an integrated circuit production system, class 700, subclass 121.
6. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as for a generic master-slave control system. See MPEP § 806.05(d).

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7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
8. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.
9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

10. If applicant is claiming priority under 35 U.S.C. 119, cross-reference to related applications should be included after the title of the invention. See below.
11. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper

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case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT.

(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer
program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR
1.821(c)), and tables having more than 50 pages of text are permitted to be
submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP §
608.05(a). "Microfiche Appendices" were accepted by the Office until
March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37
CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE
DRAWING(S).

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(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A

“Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

Claim Objections

12. **Claim 1** is objected to because of the following informalities:

Lines 15 and 16 recite “said adaptively adaptively compensated” where they should recite --said adaptively compensated--.

Line 2 recites “the operational program” where it should recite --an operational program--.

Line 6 recites “the reference data” where it should recite --reference data--.

Line 9 recites “said master reference data” where it should recite --said reference data--.

Appropriate correction is required.

13. **Claim 2** is objected to because of the following informalities: Lines 1 and 2 recite “the operational program” where they should recite --an operational program--.

Appropriate correction is required.

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14. **Claim 18** is objected to because of the following informalities:

Line 2 recites “the operational program” where it should recite --an operational program--.

Lines 5-6 recite “the reference data” where they should recite --reference data--.

Line 8 recites “said master reference data” where it should recite --said reference data--.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. **Claims 1 and 18** are rejected under 35 U.S.C. 102(a) as being anticipated by applicant’s admitted prior art (pg. 1, line 13 - pg. 4, line 25 of the specification) (hereinafter AAPA).

As for claims 1 and 18, AAPA discloses a computerized system for customizing the operational program for a slave object on a slave machine, comprising:

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a master segmentator operable to group the action sites of a master object on a master machine into segments and store the reference data related to said segments in a master file [pg. 4, first paragraph, "In the step of...machines as needed."];

a slave regenerator, coupled to said master file, operable to regenerate said master reference data so that variable characteristics of said slave machine are defined and adaptively compensated [pg. 4, second paragraph, "In the step of...of each home."];
and

a slave corrector, coupled to said slave regenerator, operable to correct said operational program for said slave object on said adaptively compensated slave machine [pg. 4, third paragraph, "In the step of...on the machine."].

17. **Claims 1 and 18** are rejected under 35 U.S.C. 102(b) as being anticipated by Seki et al (US 5,963,451) (hereinafter Seki).

As for claims 1 and 18, Seki discloses a computerized system for customizing the operational program for a slave object [machined object] on a slave machine [slave machine is the NC device, not shown], comprising:

a master segmentator operable to group the action sites of a master object on a master machine into segments and store the reference data related to said segments in a master file [performed by CAD system; col. 3, lines 12-41, "According to another...updated for renewal."];

a slave regenerator, coupled to said master file, operable to regenerate said master reference data so that variable characteristics of said slave machine are defined and adaptively compensated [steps S6-S9, fig. 6]; and

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a slave corrector, coupled to said slave regenerator, operable to correct said operational program for said slave object on said adaptively compensated slave machine [CAM system generates new NC data; col. 3, lines 12-41, "According to another...updated for renewal."].

18. **Claims 1 and 18** are rejected under 35 U.S.C. 102(b) as being anticipated by Kono et al (US 5,516,023) (hereinafter Kono).

As for claims 1 and 18, Kono discloses a computerized system for customizing the operational program for a slave object [IC chip] on a slave machine [bonding head 4 and bonding tool 3, Fig. 8], comprising:

a master segmentator operable to group the action sites of a master object on a master machine into segments and store the reference data related to said segments in a master file [col. 2, lines 64-68, "The memory unit stores...to wire bonding."];

a slave regenerator, coupled to said master file, operable to regenerate said master reference data so that variable characteristics of said slave machine are defined and adaptively compensated [col. 3, lines 1-16, "The image processing unit...wire bond objects."]; and

a slave corrector, coupled to said slave regenerator, operable to correct said operational program for said slave object on said adaptively compensated slave machine [col. 3, lines 13-16, "The control unit...wire bond objects."].

Double Patenting

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19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. **Claims 1, 2, 18 and 19** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 6,597,963 B2 (hereinafter Koduri '963). The applicant is reminded that the specification may be used to support the double patenting rejection where the invention claimed in the application is "an obvious variation of an embodiment disclosed in the patent which provides support for the patent claim." [see MPEP 804 B.I.; *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970)].

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As for claims 1 and 18, although the conflicting claims are not identical, they are not patentably distinct from each other because the “action sites” recited in claims 1 and 18 of the application may be represented as image data and location data recited in claims 3 and 20 of Koduri ‘963. This interpretation is supported by applicant’s disclosure [pg. 18, lines 10-18, “Associated with the...adaptive compensator 322.”] and Koduri ‘963 [col. 5, lines 4-17, “Another object of...slave object, are available.”].

As for claim 2, Koduri ‘693 does not specifically recite the limitation of a “fourth input data generator” as recited in claim 2 of the application. As for claim 19, Koduri ‘693 does not specifically recite the limitation of a “consecutively selected slave object” as recited in lines 43-44 of claim 19 of the application. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Koduri ‘693 by adding a fourth input data generator and selecting a consecutive slave object in order to speed up the assembly line process.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,629,013 B2, note previous patent; US 2001/0044669 A1, note related application; US 6,198,981 B1, note slave control, Fig. 4; US 5,579,984, note bonding system; US 5,862,974, note bonding system; US 6,429,187 B1 note computer vision system; US 5,615,821, note bonding apparatus and method; US 6,467,673 B2, note Fig. 3; US 5,115,400, note Fig. 1.

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22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (703)305-4897. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on (703)305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Aaron Perez-Daple


ANIL KHATRI
SUPERVISORY PATENT EXAMINER